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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/799,234

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EXAMINER

SERGEANT, RABON A

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/799,234	Applicant(s) SHIDAKER ET AL.	
	Examiner Rabon Sergent	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2007 and 11 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The terminal disclaimer filed on January 25, 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent 6,887,911 has been reviewed and is accepted. The terminal disclaimer has been recorded.

2. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants have failed to define the language, “essentially free”, as it pertains to the oxyalkylene units of the poly(dimethylsiloxane)-polyoxyethylene surfactant. It cannot be determined what amount of the oxyalkylene units in question may be present and still satisfy the language.

3. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Within claim 1, the language, “essentially free”, as it pertains to the oxyalkylene units of the poly(dimethylsiloxane)-polyoxyethylene surfactant renders the claims indefinite, because it cannot be determined what amount of the oxyalkylene units in question may be present and still satisfy the language.

4. Applicants have argued that in view of comparative examples 1 and 2, showing a content of 0.0011 moles propylene oxide per 100 g of polymer, the specification shows that these surfactants are not essentially free of oxyalkylene groups other than oxyethylene groups. In response, applicants’ argument in no way defines what is meant by or encompassed by

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“essentially free”. Firstly, applicants’ argument serves only to state what is “not” essentially free; it fails to establish any range or limit as to what satisfies “essentially free”. Applicants’ argument fails to guide one as to exactly what quantity of the argued oxyalkylene groups may be present and still satisfy the argued language. Secondly, it is noted that example 8 is not a comparative example, yet it specifies a quantity of the argued groups that far exceeds that of the argued comparative examples. Accordingly, it is unclear that identification of the examples as simply being comparative examples serves any purpose in establishing the meaning of the language. Furthermore, since example 8 is presumably representative of applicants’ invention, it suggests that the argued content of oxyalkylene groups other than oxyethylene is not as argued. In other words, applicants’ own examples refute applicants’ logic and serve to reinforce the position that no clear definition of the language has been set forth and that the language renders the claims indefinite.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dempsey et al. ('696) in view of Parks et al. ('176) or Mackey ('553 or '528) and further in view of Gillis et al. ('107 or '939).

Dempsey et al. disclose the production of molded polyurethane products, including SRIM products, wherein an internal mold release agent comprising fatty polyesters, that correspond to applicants' claimed fatty polyester, is utilized with a polysiloxane surfactant that corresponds to applicants' claimed poly(dimethylsiloxane)-polyoxyethylene surfactant. Dempsey et al. disclose this surfactant as L-6980. Dempsey further exemplifies surfactant L-5340. See examples.

Dempsey et al. further teach at column 8, line 16 that surfactants corresponding to those of applicants are preferred components of the composition. Though surfactant L-5340 contains propylene oxide groups, this surfactant is considered to satisfy the claims since no definitive meaning of "essentially free" can be established and no definitive determination can be made that such a surfactant is excluded by the claims. Furthermore, it is noted that calculations analogous to those set forth within the 37 CFR 1.132 declaration of January 25, 2007 indicate that the quantity of ethylene oxide groups attributable to the surfactant within Example 2, Runs 3-6, where surfactant L-5340 is used, exceeds that claimed.

7. Dempsey et al. fail to disclose applicants' component c)ii), fatty acid; however, applicants' specifically claimed mold release agent comprising both a fatty polyester and a fatty acid were known to be useful internal mold release agents for RIM and SRIM polyurethane moldings at the time of invention. This position is supported by the teachings of Parks et al. and

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Mackey. Parks et al. disclose applicants' claimed internal mold release agent within the abstract; column 2; and column 3, lines 1-46. Mackey discloses applicants' claimed internal mold release agent within the abstract and columns 3 and 4. The references further disclose the use of surfactants. See column 7, lines 30-47 within Parks et al. See column 9, lines 18-20 within Mackey.

8. Since it has been held that it is prima facie obvious to utilize a known component for its known function and in view of the teachings within Parks et al. and Mackey to utilize a fatty acid component in admixture with a fatty polyester component to produce mold release compositions for SRIM polyurethane moldings, the position is taken that it would have been obvious to incorporate the claimed fatty acid into the mold release agent composition of Dempsey et al., so as to arrive at the instant invention. *In re Linder*, 173 USPQ 356. *In re Dial et al.*, 140 USPQ 244.

9. Furthermore, Gillis et al. disclose that the combination of polysiloxane surfactants with mold release agents comprising a fatty acid ester component yields a synergistic result in terms of the effectiveness of the mold release property in SRIM systems. See column 2, line 55. While Gillis et al. fail to specifically disclose applicants' claimed surfactant and mold release agent, the position is taken that, since each of the disclosed mold release agents within Dempsey et al., Parks et al., and Mackey is derived from long chain fatty compounds, the mold release agents of these references are analogous to the mold release agent of Gillis et al. to the extent that one of ordinary skill would have expected them to yield comparable release properties to that of Gillis et al. Accordingly, one would have reasonably expected that the combined use of fatty compound based release agents and polysiloxanes would yield SRIM compositions having

improved mold release, relative to compositions not employing these respective components in combination.

10. Applicants' response has been considered; however, the response fails to overcome the prior art rejection for the following reasons. Firstly, applicants' arguments and 37 CFR 1.132 declaration fail to address the fact that an additional surfactant, L-5340, is disclosed that meets the claims which is used in a quantity that also meets the claims. Secondly, applicants have argued that the quantity of oxyethylene groups within Example 1 is at most 0.0053 moles of EO per 100 grams of polymer. In response, while this amount is below that claimed, the position is taken that this content is so close to that claimed, that one of ordinary skill would have reasonably expected the respective compositions to display the same properties. The logic for this position stems from the rationale set forth within the court decision, *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). Furthermore, this position is bolstered by applicants' own Example 6, which shows that an EO content of 0.0052 moles per 100 grams of polymer yielded good mold release properties.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

/Rabon Sergent/
Primary Examiner, Art Unit 1796

R. Sergent
March 12, 2008